

**Air Pollution Control District  
Jefferson County, Ky  
25 April 2002**

**TITLE V PERMIT SUMMARY**

**Company:** PolyOne

**Plant Location:** 4200 Bells Lane, Louisville, Kentucky 40211

**Date App. Received:** Initial - 21 February 1997; Revised Initial - 28 April 1999

**Date App. Administratively Complete:** Initial - 18 April 1997; Revised Initial - 7 May 1999  
Change of Ownership/Name: 1 September 2000

**Date of Draft Permit:** 28 January 2001      **Date of Proposed Permit:** Initial: 23 January 2001

**District Engineer:** Darrell T. Poff      **Permit No.:** 152-97-TV

**Plant ID:** 0459      **SIC:** 3087      **NAICS:** 325991      **AFS:** 00459

**Introduction:**

This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

Jefferson County is classified as of the date above as an attainment area for lead (Pb), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns (PM<sub>10</sub>), and ozone (O<sub>3</sub>) (1 hour standard); unclassifiable for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and ozone (O<sub>3</sub>) (8 hour standard).

**Application Type/Permit Activity:**

- ☒ Initial Issuance
- ☐ Permit Revision
  - ☐ Administrative
  - ☐ Minor
  - ☐ Significant
- ☐ Permit Renewal

**Compliance Summary:**

[X] Compliance certification signed                      [ ] Compliance schedule included  
 [ ] Source is out of compliance

**I. Source Description**

1. **Class I Area Impacts:** This source is not located in or near a Class I area.
2. **Product Description:** The source produces powder, pellet, and cube compounds.
3. **Overall Source Process Description:** Resin and various dry additives are mixed (i.e., blended) to form dry blend. Resin, dry blend, and other additives are mixed (i.e., compounded) to form powder compounds. Pellet/cube compounds are formed when a resin/dry blend/additive mixture is extruded or milled and then cut or diced. Final products can be temporarily stored on-site or shipped off-site in either packaged or bulk form.
4. **Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
5. **Emission Unit Summary**
  - a. **Compounding (U-CMP):** See 3, above.
  - b. **Miscellaneous (U-MS):** This Emission Unit consists of an air sparging/soil vapor extraction system and a cold solvent parts washer.
6. **Fugitive Sources:** None of significance, i.e., none subject to a NESHAP, etc.
7. **Title V Major Source Status by Pollutant**

Pollutant	Actual Emissions (tpy) 1999 Data	Major Source Status (based on PTE)
CO	Negligible	No
NO <sub>x</sub>	Negligible	No
SO <sub>2</sub>	Negligible	No
PM	9.65	Yes
VOCs	16.18	Yes
Total HAPs (VOC and Non-VOC)	0.69	Yes

**8. Applicable Requirements**

[ ] PSD            [ ] NSPS            [ ] SIP            [ ] NSR            [ ] NESHAPS  
 [X] District-Origin    [ ] MACT            [ ] Other

## II. Regulatory Analysis

1. **Emission and Operating Caps:** The source is not subject to any plant-wide emission or operating caps.
2. **Compliance Status:** The source signed and submitted a Title V compliance certification in both its initial and revised initial permit applications, as well as at the time of notification of the name/ownership change from Geon to PolyOne. Note, the source is in compliance with Regulation 2.16, section 3.1.1.1.4, which requires this source to submit a complete permit application by 22 April 1997. Geon submitted its initial permit application on 21 February 1997, which was determined administratively complete on 18 April 1997. However, due to the creation of Oxy Vinyls, LP on 1 May 1999, which resulted in changes to the Geon Louisville plant, Geon submitted a *revised* initial permit application on 28 April 1999, which was determined administratively complete on 7 May 1999. Effective 1 September 2000, Geon became PolyOne.
3. **Operational Flexibility:** The source did request to operate under alternative operating scenarios in its revised initial Title V Permit Application for raw materials use and equipment flexibility use; however, the District has determined these do not fit the definition of an Alternative Operating Scenario, an option by which a company has defined a *specific*, alternative mode of operation. Nonetheless, this language has been incorporated in PolyOne's Title V Permit to accommodate the source's wish for operational flexibility.
4. **Testing Requirements:** See Item II.5.a.i, below.
5. **Monitoring, Record Keeping and Reporting Requirements:**
  - a. The source is required to monitor, maintain records of, and report on various operating parameters to demonstrate ongoing compliance with all applicable requirements, as follows:
    - i. PM - To monitor proper operation of required control devices, the source will perform daily visible emission surveys for each Emission Point's associated stack, which also will fulfill the opacity monitoring requirement. For each Emission Point subject to Regulation 6.09 or 7.08, the source has submitted one-time compliance demonstrations that, within the potential operating capacity of the equipment associated with each Emission Point, the PM regulatory-allowable emission rate cannot be exceeded. Therefore, the designation of "regulatory allowable" has been used in place of a specific, numerical PM allowable emissions figure. Note, the applicable regulations prescribe increasing PM allowables for increasing equipment capacities. Additionally, because the control devices were sized for the maximum capacity of the equipment (and therefore, for the maximum PM allowable), the one-time compliance demonstrations' ranges include these "endpoints". Notwithstanding this, the source also requested actual PM allowables not be included in the permit for reasons of confidentiality, as the capacity of the affected equipment could be determined from these.

Stack testing will be performed on representative equipment once during the initial permit term at five locations approved by the District, each representing one of the five emission factors, to verify the control efficiencies and emission factors used in the one-time compliance demonstrations for PM. Said testing will be conducted per the specifications of 40 CFR 60, Appendix A, Methods 1 through 5.

- ii. Opacity - Visible emission surveys are required of most PM Emission Points. At Emission Points where visible emissions are observed, the owner or operator is required to initiate corrective action within eight hours of the initial observation. If the visible emissions persist, a Method 9 (or Method 22, as appropriate) will be performed within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator is required to report the exceedance to the District and to take all practicable steps to eliminate the exceedance. Because the source operates without visible emissions, as confirmed during compliance inspections, the visible emissions surveys begin on a weekly basis and are allowed to be stepped down to monthly if no visible emissions are observed for twelve consecutive operating weeks. Notwithstanding this, however, PM Emissions Points with required control devices that vent to the outside atmosphere are required to have daily visible emission surveys (no step-down option).
  - iii. TAPs - In lieu of monitoring, the source has opted to demonstrate ongoing compliance with District only enforceable Regulations 5.11 and 5.12 by implementing a Management of Change System (MOCS). This system will track changes in operation (including raw materials use) that might affect compliance with these regulations.
  - iv. Compliance reporting is required semi-annually, except where underlying applicable regulations or permit conditions require more frequent reporting.
- b. Monitoring, record keeping, and reporting are not required for the following regulations for the reasons indicated:
- i. Regulation 7.25, section 2.1 - The source has demonstrated that its potential, source-wide, VOC emissions are less than five tons per year for Emission Points subject to this regulation. Since the source's demonstration is based on uncontrolled VOC emissions, no monitoring, record keeping, or reporting are required.
  - ii. Regulation 6.24, section 3.3 - The source has demonstrated that its potential VOC emissions are less than 450 pounds per hour and 3000 pounds per day for each Emission Point subject to this regulation. Since the source's demonstration is based on uncontrolled VOC emissions, no monitoring, record keeping, or reporting are required.
  - iii. Opacity: Opacity monitoring is not required for PM Emission Points (equipment) handling *only* pellets, as the likelihood of PM emissions from these, e.g., from attrition by abrasion, is nil. The pellets handled at these Emission Points are various polymeric materials which, by the nature of their physical characteristics, are not

friable. Additionally, opacity monitoring is not required for PM Emission Points venting indoors

**6. Off-permit Documents:** A MOCS, approved by the District on 31 August 2001.

The District considers an “off-permit document” as a document on which a source’s compliance with given regulation(s) is contingent or which contains regulatory requirement(s), but is only referenced in a source’s Title V Operating Permit. The designation “off-permit document” shall be made at the District’s discretion, and may include, but not be limited to, documents such as Regulation 1.05 VOC compliance plans, PMPs, MOCS; or other documents which are too voluminous to be included in a source’s Title V Operating Permit, as determined by the District.

**III. Other Requirements:**

- 1. Temporary Facilities:** The source did not request to operate any temporary facilities.
- 2. Short Term Activities:** The source did not report any short term activities.
- 3. Compliance Schedule/Progress Reports:** The source has certified compliance with all applicable requirements; therefore, no compliance schedule or progress reports are necessary. Additionally, the source identified in its initial and revised initial permit applications, and subsequent addenda, applicable and non-applicable Federal and District regulations in effect at the time of the permit applications. This permit grants a permit shield based upon the District’s review of these documents, and the source’s request for this permit shield.

Note that the source is not subject to Regulation 2.04, Construction or Modification of Major Sources in or Impacting upon Non-Attainment Areas (Emission Offset Requirements) as construction of the affected major source facilities occurred prior to the applicability date of 21 April 1982 and no Major Modifications have been made by the source since that date.

- 4. Emissions Trading:** The source does not participate in emissions trading.
- 5. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.
- 6. Stratospheric Ozone Protection Requirements:** Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any source that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals; however, it does use Halon 1301 and Halon 2402 in a fire extinguishing system.
- 7. Prevention of Accidental Releases 112(r):** The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR 68 Subpart F and Regulation 5.15, Chemical Accident Prevention Provisions, in a quantity in excess of the corresponding specified threshold amount.

**8. Insignificant Activities:** The following activities, as referenced in the source's Title V Permit Application, have been determined by the District to be insignificant.

Insignificant Activities		
Description	Quantity	Basis
Emergency Relief Vents or Ventilating Systems not otherwise regulated	Various	Regulation 2.02, section 2.3.10
Indoor PM Collectors Venting Indoors (Non 5.11, 5.12, or 5.14 Regulated /Material)	Various	Regulation 2.02, section 2.3.21
Miscellaneous Drums and Totes	Various	No known underlying applicable requirement.
Miscellaneous PM Containers/Equipment	Various	No known regulated emissions to the atmosphere.
Internal Combustion Engines, Fixed or Mobile	Various	Regulation 2.02, section 2.2
Brazing, Soldering, or Welding Equipment	Various	Regulation 2.02, section 2.3.4
Lab Ventilating and Exhausting Systems, Non-radioactive Materials	Various	Regulation 2.02, section 2.3.11
Soil or Groundwater Contamination Remediation, Passive or Total Removal	As needed	Regulation 2.02, section 2.3.20
Diesel Fuel Storage Tank	Various	Regulation 2.02, section 2.3.25

- Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- Activities identified in Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
  - No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirement which shall include a 20% opacity limit for facilities not otherwise regulated.
  - No periodic monitoring shall be required for facilities designated as insignificant activities.